

**Title 26 DEPARTMENT OF THE ENVIRONMENT**

**Subtitle 04 Regulation of Water Supply, Sewage Disposal, and Solid Waste**

**Chapter 10 Management of Coal Combustion Byproducts**

Authority: Environment Article, §§ 2-301, 9-252, 9-289, 9-302, 9-313, 9-314, 15-503, and 15-803, Annotated Code of Maryland

**Notice of Proposed Action**

The Secretary of the Environment proposes to amend Regulation .03 under **COMAR 26.04.10 Management of Coal Combustion Byproducts**.

**Statement of Purpose**

The purpose of this action is to amend and clarify the existing requirements for the control of air emissions of coal combustion byproducts that can arise from the transportation of coal combustion byproducts, as authorized by and in accordance with the provisions of Environment Article Section 9-289 of the Annotated Code of Maryland. Specifically, a new paragraph is proposed as COMAR 26.04.10.03B(4), which clarifies and adds to the responsibilities of those persons engaged in the transportation of coal combustion byproducts.

Coal combustion byproducts (CCBs) include coal flyash, bottom ash, and related materials, and are known to the Department of the Environment to have the potential to pollute the air, surface water, and groundwater if they are mismanaged. They also have the potential to be constructively recycled and put to beneficial uses. These activities generally require the transportation of the CCBs in trucks or other vehicles that have the potential to release CCBs to the air by allowing the CCBs to blow out of open trucks, or to be carried out onto roads by the wheels of the transport vehicles, and agitated by the movement of traffic, causing a subsequent release to the air. The proposed regulations are needed to insure the safety of the environment

and citizens of Maryland by controlling these potential releases.

### **Comparison to Federal Standards**

There is no corresponding federal standard to this proposed action.

### **Estimate of Economic Impact**

**I. Summary of Economic Impact.** The proposed regulation requires persons transporting CCBs to utilize reasonable measures to prevent dust emissions from the CCBs. These requirements are:

A) The vehicles transporting coal combustion byproducts must be fully enclosed, or fully enclosed on all sides and covered with a firmly secured canvas or other covering, so as to prevent any coal combustion byproducts from blowing off, falling off, or spilling out of the vehicle;

B) Before leaving a site where coal combustion byproducts are loaded or off-loaded, the vehicles transporting the CCBs must be cleaned of CCBs that could blow off, fall off, or spill during transportation;

C) Coal combustion byproducts being loaded into or off-loaded from a vehicle must be contained, e.g., with a chute or other device, or be sufficiently moistened or otherwise conditioned or contained to prevent the CCBs from becoming airborne or causing fugitive air emissions; and

D) The vehicle drivers must maintain an inspection log for 30 days that indicates that they checked their vehicle to make sure that it complied with these regulations when they were transporting CCBs.

The economic impact of the proposed action is believed to be minimal as the primary requirements, e.g., that vehicles transporting CCBs be sealed or covered to prevent CCBs from blowing or falling out of vehicles, and that they not otherwise track CCBs out of controlled areas, are already required by other Maryland regulations (e.g., Department of Transportation Regulations under COMAR 11.13.11, Load Covers; and Maryland Department of the Environment Regulations 26.11.06.03, Particulate Matter). These requirements are reiterated in the current proposal to comply with the intent of Environment Article Section 9-289 of the Annotated Code of Maryland, which requires the Department to propose regulations providing requirements for the transportation of coal combustion byproducts. Also, the Department is aware that the principal generators of coal combustion byproducts, the power utilities, generally already employ means of dust control at their loading locations.

Therefore, the only new economic impacts engendered by these proposed regulations are for persons who are engaged in handling of CCBs for disposal or recycling, who will have to insure that their facilities comply with the loading requirements; and transporters, who will have to insure that their vehicles are properly covered and cleaned of CCBs before setting out with a load of CCBs, and must maintain a log demonstrating that they checked to be certain that the vehicle met the requirements.

II. Types of Economic Impacts.	Revenue (R+/R-)	Magnitude
	<u>Expenditure (E+/E-)</u>	
A. On issuing agency:	NONE	
B. On other State agencies:	NONE	
C. On local governments:	NONE	
	Benefit (+)	Magnitude
	<u>Cost (-)</u>	

D. On regulated industries or trade groups:	(-)	\$173,700/year
E. On other industries or trade groups:	NONE	
F. Direct and indirect effects on public:	NONE	

**III. Assumptions.** (Identified by Impact Letter and Number from Section II.)

D. Environment Article Section 9-289 of the Annotated Code of Maryland authorizes and requires the Department to propose regulations governing the transportation of CCBs. The estimated cost to the industry is based on an approximation of costs for new or retrofitted dust control equipment at facilities that may not now meet the requirements of the proposed regulation; and for the minimal costs to drivers of CCB transport vehicles for keeping a log. The Department is aware that contained loading equipment is commercially available to insure that vehicles are loaded with CCBs in a manner that prevents fugitive dust releases of the CCBs. Also, simpler procedures such as use of water mists can be implemented to satisfy both the dust control and moistening requirements. Therefore, the Department considers that the annual impact to the industry will be on the order of 15 new or retrofitted loading dust control systems per year, at an added cost of \$1,500 per facility, or a total annual cost to the industry for this requirement of \$22,500.

Also considered is the additional time required for drivers to inspect their vehicles, and maintain a log of their observations and corrective actions. It is estimated that the average time to conduct an inspection and maintain the log is 5 minutes, including time for some percentage of the drivers to take corrective action to tighten a tarp or re-clean vehicle tires. It is assumed that the current annual generation rate of 2 million tons of CCBs generated in Maryland will be hauled by vehicles having an average capacity of 25

tons (e.g., a mix of 20-ton dump trucks and 40-ton semi-trailers), producing approximately 80,000 vehicle trips per year. At an average annual salary of \$40,000 per year, or per hour for (derived from a summary of salaries reported by the Economic Research Institute for dump truck drivers nationally, see [http://www.erieri.com/job-](http://www.erieri.com/job-salary-data/185/Truck-Driver-Dump.htm)

[salary-data/185/Truck-Driver-Dump.htm](http://www.erieri.com/job-salary-data/185/Truck-Driver-Dump.htm)) or (assuming 1760 work hours per year, or 220 man-days times 8 hours per day) \$22.73 per hour, the 5-minute inspection will cost approximately \$1.89 per trip, for a total annual inspection cost to the industry of \$151,200.

Thus, the total impact of the regulation on the industry as a whole is estimated to be (\$151,200 + \$22,500 = ) \$173,700 per year. Most of this impact is estimated to occur to the utilities and their contractors.

### **Economic Impact on Small Businesses**

The proposed action has minimal or no economic impact on small businesses.

### **.Impact on Individuals with Disabilities**

The proposed action has no impact on individuals with disabilities.

### **Opportunity for Public Comment**

Comments may be sent to Gail Castleman, Department of the Environment, Land Management Administration, 1800 Washington Blvd., Baltimore MD 21230, or fax to (410) 537-3156 or email to [gcastleman@mde.state.md.us](mailto:gcastleman@mde.state.md.us). Comments will be accepted until the close of business on March 29, 2010.

## Part C

(For legislative use only; not for publication)

- A. Fiscal Year in which regulations will become effective: FY 2011.
- B. Does the budget for fiscal year in which regulations become effective contain funds to implement the regulations?
- Yes X
- C. If “yes”, state whether general, special (exact name), or federal funds will be used:  
Special Funds – State Coal Combustion By-Products Management Fund (see Section 9-281-285 of the Environment Article, *Annotated Code of Maryland.*).
- D. If “no”, identify the source(s) of funds necessary for implementation of these regulations:
- 
- E. If these regulations have no economic impact under Part A, indicate reason briefly:
- N/A.
- F. If these regulations have minimal or no economic impact on small businesses under Part B, indicate the reason.

The proposed action has minimal or no economic impact on small businesses.

The principal effect of these regulations will be on large-scale generators or users of coal combustion byproducts such as the electric power utilities, which are not small businesses. It is possible that some small businesses not now engaged in CCB use may choose to become involved in the future, but the economic impact on these small businesses cannot be accurately estimated although is expected to be minimal or even positive for the reasons stated in the analyses presented for the industry as a whole.

# **DRAFT**

## **Coal Combustion Byproducts**

## **Transportation Regulations**

26.04.10

Date Existing Text Acquired from DSD Website: December 26, 2009.

.03 General Restrictions and Specifically Prohibited Acts.

A. (text unchanged)

B. Specific Prohibited Acts.

(1) — (3) (text unchanged)

*(4) Transportation. In addition to the requirements of subsection (3), a person may not transport coal combustion byproducts without taking reasonable precautions to control fugitive air emissions relating to the transportation. These reasonable precautions shall include, at a minimum, the following:*

*(a) Vehicles transporting coal combustion byproducts shall be fully enclosed, or fully enclosed on all sides and covered with a firmly secured canvas or other covering, so as to prevent any coal combustion byproducts from blowing off, falling off, or spilling out of the vehicle, or the coal combustion byproducts shall be handled and transported in sealed containers designed for transportation of powdery solids;*

*(b) Before leaving a site where coal combustion byproducts are loaded or off-loaded, vehicles transporting coal combustion byproducts shall be rendered clean and free of excess material or debris that could blow off, fall off, or spill during transportation;*

*(c) Coal combustion byproducts being loaded into or off-loaded from a vehicle shall be sufficiently moistened or otherwise conditioned or contained to prevent particulate coal combustion byproducts from becoming airborne or causing fugitive air emissions;*



*(d) Following loading but prior to any transportation of coal combustion byproducts, the transporter shall inspect each vehicle that contains coal combustion byproducts to ensure that the requirements of this subsection are met.*

*(e) A transporter of coal combustion byproducts shall maintain an inspection log for each vehicle that shall be maintained in the vehicle at all times during transport of coal combustion byproducts, and for 30 days thereafter that shall certify compliance with the standards in this subsection.*

*(f) An inspection log maintained by a transporter of coal combustion byproducts shall consist of an entry for each inspection of a vehicle that has been conducted by the transporter. An inspection entry shall consist of the following information:*

*(i) The date the inspection occurred;*

*(ii) The time of day the inspection occurred;*

*(iii) The name of the person conducting the inspection;*

*(iv) The condition of the vehicle and any corrective action required to ensure compliance with this subsection, for example, “truck cleaned and covered” for a vehicle that meets the requirements, or “cover OK, right side wheels hosed off again” for a vehicle that was properly covered but which required re-cleaning of wheels on the right side; and*

*(v) The signature of the individual certifying compliance with this subsection.*